Robinson Telephone

"Communicate, don't ex-communicate"

From the Desk of:

Paul Robinson

"Above all else... We shall go on..."
"...And continue!"

Transmittal Letter

To the Secretary, Federal Communications Commission:

Enclosed are 5 copies of my reply to the Commission's inquiry in docket 05-182, "Technical Standards for Determining Eligibility For Satellite-Delivered Network Signals Pursuant To the Satellite Home Viewer Extension and Reauthorization Act."

Sincerely Yours,

Paul Robinson

Paul Robinson
"A computer programmer and
Notary Public in and for the
Commonwealth of Virginia, at large"
General Manager
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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Technical Standards for Determining Eligibility For Satellite-Delivered Network Signals Pursuant To the Satellite Home Viewer Extension and Reauthorization Act	)	ET Docket No. 05-182
	)	

Response by May 18, 2005

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In the Commission's request for comments, it raises a number of issues which are significant to the carriage of digital signals from a distant market into an area which may or may not be served with a satisfactory quality signal even within the grade-b contour of a local station. Among the issues the commission has raised, or apparently has raised, is whether a statistical estimate or computer-based analysis system is adequate for determining signal strength for grade-b coverage or whether other methods are necessary.

In this respondent's opinion, more needs to be taken into account than the theoretical or expected reception level which general engineering estimates would apparently indicate is adequate to supply a level of signal adequate for reception.

While the Commission has provided that for certain classes of communications, local authorities (including land owners and condominium associations as well as cities and states, by statute) may not prohibit or restrict the use of certain devices (such as small satellite dishes), or require use of someone else's facilities (such as in the case of use of unlicenced wireless spectrum for construction of computer networks), there are permissible restrictions such as not permitting device installation in areas the party wishing to install the device does not have ownership or control over (such as making it permissible to prohibit installing a satellite dish in a common area of a condominium complex.)

The issue of where a digital antenna may be installed as well as the type of antenna which may be installed is relevant. Antennas do not always vary in quality simply on the basis of price; sometimes inexpensive antennas from one manufacturer may do a better job at providing an adequate quality signals over antennas from other manufacturers which are more expensive.

Also, while engineering analysis may dictate that signal quality is adequate in a specific area, a

pure engineering analysis may miss real world conditions that dictate otherwise.

It is one thing to determine that by engineering analysis that an area is reasonably within a satisfactory quality grade-b signal, it's another to discover the engineering analysis is flawed because it presumes customers can install outdoor antennas, a practice which may not be available.

Measurements may, and in fact should, take into account differences between densely populated urban areas, and lightly populated rural areas.

The Commission should take into account the classification of the general environment of a particular class of coverage, in that, for example, in a dense urban area, most people may be living in multi-story apartment buildings or in condominium complexes and may be unable to install an external antenna, either because they have no access right to any outdoor space (as in the case of someone living in a condominium that has no private yard) or because they have no outdoor space at all (someone living in a multistory apartment building without a balcony.).

Where engineering estimates would probably show that yes, a satisfactory quality signal is available within the grade-b contour, such estimates must take into account that for a particular area, most if not all antennas may be indoor only. If a person lives in a multi-story building and their apartment does not have a balcony, an external antenna clearly is impossible and this should be taken into account.

In allowing a station to exclude distant signals the onus should be on the local station to show that it is able to supply adequate signal quality within the grade-b contour on the basis of actual measurements that realistically match real-world conditions of a majority of persons who would allegedly receive their signal.

In determining signal measurement, an equivalent number of actual measurement points should be required relative to some percentage figure relative to the general population of the area which it is claimed by the station to be able to receive its signal, and the reception points should be such that they are in multiple areas of the grade-b contour region, such that whatever measurement is made is a fair representation of what generally should be expected of persons using receiving equipment in the grade-b region.

For example, if an estimate of 1% of the population of the grade-b contour is considered what is necessary to be selected, and the estimated population of that particular region, based on engineering estimates of signal strength, indicates that 150,000 people live in that region, then the station should be required to collect 1500 measurements. Such measurements, ideally, would be from the fringe points of what is claimed to be the edge of the grade-b contour, as well as measurements within the contour. Quite possibly, a random selection of points may be more appropriate.

Such measurements, where made, should be as close to real-world conditions as would be

expected, presumably, by asking residents who live at the selected or computed points, to allow the party performing the measurements to do so from within their home. It is quite likely that people will be delighted to participate, as most people would prefer to have someone see if they are not receiving adequate reception. As such testing probably would run no more than 5 minutes or so, the request would not be overly burdensome for the home's resident.

In the conducting of such tests, a range of antennas should be required. The Commission should survey electronics, home repair and television stores, either by visit, by examining regular advertising materials, or by telephone call, the range and price of available antennas suitable for this purpose.

The Commission should probably perform an engineering analysis of several brands and types of antennas, with a view in most cases to using the least expensive model of antennas that are generally available for commercial purchase, as well as the antennas that tend to be of less quality over higher quality.

The Commission should then show which brands of antennas it used and recommend these for testing purposes.

The reason for this rationale is that most people purchasing electronic equipment are not technically sophisticated. They will probably presume all antennas are the same and purchase either the least expensive or that are the least intrusive looking in terms of appearance.

Also, if testing is done with inexpensive and low quality antennas, and the quality of reception levels are still adequate, then anyone using more expensive or higher quality antennas could reasonably be expected to have equal or better results.

Stations may also be permitted to use more expensive and/or better quality antennas in addition to the above testing factors to show that their signal is reasonably accessible, as long as the price of the antenna is within a reasonable range of typical prices for retail purchase of antennas.

The same provisions should apply to digital receivers and digital television sets.

The commission should also examine issues of the difference between reception using a digital to analog adapter, and an actual television set capable of digital reception, as there may be differences between reception in both cases even where the two devices come from the same manufacturer.

Also, it should be noted most people are unlikely to be willing to discard perfectly satisfactory analog television sets in order to purchase expensive digital televisions that currently do not really provide any significant improvement in picture quality at this time.

The Commission should also provide for the invalidation of a station's claim of adequate reception based on some criteria showing the data provided to have too much error. For

example, if a third party takes similar measurements at identical or near-identical points as the station did, and finds that over some number of measurements provide lower quality or unsatisfactory quality signal (for example, let's use 5%, meaning that of the 1500 measurement points given in the above example, if more than 5% are incorrect, or 75 do not provide the same reading) then the station's measurement claiming satisfactory quality signal levels are being received in the grade-b contour should be considered invalid and a privilege to exclude distant signals be revoked for some period, until new measurements which correct these errors has been made and recertified by the station or the company that performed the tests for the station.

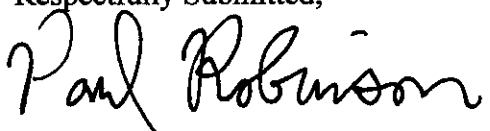
The period could be some factor such as six months from when a new measurement causes decertification of a station's test results, or until new results are certified, whichever is later. This would give an incentive for stations to make sure the evidence they provide is correct, as if it is found to have errors, they lose the privilege of mandating exclusivity from distant signals for at least six months.

A third party should be permitted to present the evidence to the Commission which will then allow the television station to rebut such evidence provided to show otherwise. In the event the station does not satisfactorily rebut the evidence, the original test shall be considered invalid and distant stations may be received by persons in the area where the failed test occurred.

The Commission may set range limits for invalidating test results, such that where a test is made it may simply invalidate those areas of grade b coverage and points beyond them until 6 months later or a recertified test result is made, whichever is later, or it may invalidate the entire test, or whatever it determines is the best choice under the circumstances.

Also, the results of such tests and any potential defeating claims should be considered part of the material made available by a station as part of its license and other records that are subject to public inspection in order that other parties have access to the data the station is using in the event they wish to confirm whether the test results available are or are not valid..

Respectfully Submitted,



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